

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,051	07/13/2005	Takenori Tsuchiya	10517/281	6364
23838 VENVON & K	7590 08/27/2007 (ENVONTTP	EXAMINER		
KENYON & KENYON LLP 1500 K STREET N.W.			SHRIVER II, JAMES A	
	SUITE 700 WASHINGTON, DC 20005		ART UNIT	PAPER NUMBER
	•		3618	
			MAIL DATE	DELIVERY MODE
			08/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/542,051	TSUCHIYA, TAKENORI				
Office Action Summary	Examiner	Art Unit				
	J. Allen Shriver	3618				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	J.  lely filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 May 2007.						
· <u> </u>	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 13-25 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 13-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers	·					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 13 July 2005 is/are: a) Applicant may not request that any objection to the conference of the c	☑ accepted or b) ☐ objected to be drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All · b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		·				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/6/2007.</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 2. Claims 13-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 requires "the plurality of battery unit cells or battery modules being stacked in a longitudinal direction relative to the vehicle". However, the definition of the word "stack" is to pile in or on, to make an orderly pile. Clearly as shown in Applicant's drawings, the battery cells are not stacked or piled on top of one another. The battery cells are arranged side-by-side, and not in a pile. Therefore, it is unclear precisely what Applicant's invention is in regards to claim 13.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 13-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Misu et al. (US Patent 6,662,891 B2).

Page 3

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Misu et al. discloses a vehicular battery mounting structure comprising a floor panel (14); a seat (78) disposed above the floor panel, the seat having a back portion and a bottom portion (See Fig. 5); a battery pack (10) having a plurality of battery unit cells (22) or battery modules in accordance with a performance of a vehicle, the battery pack being disposed between the floor panel and the bottom portion of the seat (See Fig. 5), the plurality of battery unit cells or battery modules being stacked in a longitudinal direction relative to the vehicle (See Fig. 2 and 4), the battery pack further comprising a cooling fan (31) that supplies a cooling medium in a direction of the vehicle width (See Fig. 4); [claim 14] wherein the seat is a seat that does not have a power seat function; [claim 15] wherein the seat is a passenger seat or a rear seat; [claim 16] wherein the battery pack comprises a battery body (16) formed by the plurality of battery unit cells or battery modules, and a space portion that is adjacent to the battery body and that is provided at a side of the battery body that faces a center line of a width of the vehicle (See Fig. 4 and 10); [claim 17] wherein the cooling fan is provided at a side of the battery body opposite from the side that faces the center line of the width of the vehicle, and wherein the cooling fan supplies

Art Unit: 3618

the cooling medium between the battery unit cells, or between the battery modules; [claim 18] wherein the cooling fan supplies the cooling medium through the battery body from the side that faces the center line of the width of the vehicle to the side opposite from the side that faces the center line of the width of the vehicle; [claim 19] wherein the cooling fan supplies the cooling medium through the battery body from the side that faces the center line of the width of the vehicle to the side opposite from the side that faces the center line of the width of the vehicle. and discharges the cooling medium into a cabin; [claim 20] wherein the battery pack further comprises a diffusion portion for diffusing the cooling medium discharged from the cooling fan into the cabin; [claim 21] wherein the diffusion portion includes a plurality of outlets; [claim 22] wherein a suction direction of the cooling fan is a direction of a rotating axis of the cooling fan, and a discharge direction of the cooling fan is a circumferential direction relative to the cooling fan; and [claim 23] wherein the cooling fan is a sirocco fan; [claim 24] wherein the battery pack is formed by a lithium ion battery or a nickel metal hydride battery (See column 9, line 35+); and [claim 25] wherein the battery pack is disposed between a vehicle side frame member and a vehicle central frame member, the battery pack, the vehicle side frame member, and the central frame member being separated from each other.

### Response to Arguments

5. Applicant's arguments filed May 15, 2007 have been fully considered but they are not persuasive. Regarding claim 13, Applicant argues that Misu does not disclose the plurality of battery unit cells or battery modules being stacked in a longitudinal direction of the vehicle. However, as set forth above, Applicant's battery unit cells are not stacked, they are arranged

Application/Control Number: 10/542,051

Art Unit: 3618

side-by-side. Additionally, depending on the side of the battery unit cell selected in determining

Page 5

the orientation of the cells in relation to the longitudinal direction of the vehicle, there can be

multiple interpretations. Examiner believes that Misu discloses the shortest edges of the battery

unit cells are all oriented in the longitudinal direction of the vehicle, therefore, Misa does

anticipate claim 13.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to J. Allen Shriver whose telephone number is (571) 272-6698. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris

P. Ellis can be reached on (571) 272-6914.

Any inquiry of a general nature or relating to the status of this application may be made

through either Private PAIR or Public PAIR. Status information for unpublished applications is

available through Private PAIR only. For more information about the PAIR system, see

http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Mail Stop

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: (571) 273-8300 (for formal communications intended for entry). (571) 273-6698 (for informal communications directly to the Examiner).

Application/Control Number: 10/542,051

Art Unit: 3618

J. Allen Shriver Primary Examiner Art Unit 3618

JAS

Page 6